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SCHOOL AND SOCIETY

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Edited by WILLIAM C. BAGLEY

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SCHOOL AND SOCIETY

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THE SOCIETY FOR THE ADVANCEMENT OF EDUCATION, INC.

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SCHOOL AND SOCIETY, the only educational news-magazine of nation-wide circulation that is published every week throughout the calendar year, covers all major fields of educational endeavor, including colleges and universities; professional schools; public, private and parochial schools of elementary and secondary grade; and the library service.

In addition to the news of the week and accounts of educational happenings both at home and abroad, SCHOOL AND SOCIETY publishes articles of timely interest, annotated lists of all publications received, book reviews, and brief reports of educational research.

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SCHOOL AND SOCIETY

Edited by WILLIAM C. BAGLEY

VOLUME 55 SATURDAY, MAY 16, 1942 NUMBER 1429

A WORLD MORE LIKE THE UNITED STATES?

By
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WHATEVER form of organization issues from our democratic victory should itself be democratic. What is the basis of democracy?

The aim of life is individual self-realization. To secure it in a group, we need the greatest possible degree of orderly freedom for socially wholesome self-expression. Democracy is the way of living and the form of organization that yields this. It has also produced the richest material support for the development of such a spiritual ideal.

Accordingly, the basic unit in democracy is the individual. Any kind of organization that is not built on this unit should be rejected. The very terms, "nation," "international," "league of nations" and the like, mislead us; for they are almost certain to indicate associations, confederations, alliances, whose basic unit is not the individual but the government, the skeleton of the state. Such leagues do not work. Whereas no really democratic instrument of cooperation, such as the Constitution of the United States, has ever, through any defect in itself, failed to work.

The second great feature of democracy, growing out of the ideal of self-realization, is its concentration on this positive, inclusive aim, rather than on desultory, negative measures. Disarmament is such a negative object. So is any merely anti-war purpose, even though labeled "Peace Producer." The complexity of the symptoms of our world malady has led us to select and treat certain of them instead of getting at the disease. Disarmament, formal treaties, the machinery and the mechanics, receive too much attention.

When disarming actually comes, it will be incidental, as it was with our American states, a sign that the patient is better—actually forgot his crutch. As we have put peace before justice, merely blowing our breath on the living-room thermometer instead of turning up the furnace when we want heat, so we are in danger of doing with such a merely symptomatic condition as disarmament. You don't frisk your wife at the breakfast table to prevent her from shooting you that day. Nor do you draw up a treaty assigning her the assortment of knives in the kitchen as against whatever knockout weapons you can scrape up in the garage. When concordant personalities begin planning for Junior's education and other positive, constructive aims, they do not speculate whether the wife's supply of gas from the kitchen range is more deadly than the husband's from the automobile exhaust.

When our American ancestors finally hit upon the proper way to "secure the blessings of liberty" for the individual, they found they had solved, for their country, all at once, a host of minor problems which now vex the world, such as disarmament,

ready access by all to raw materials, the free movement of goods, the production of an astounding quantity of wealth.

Can we not make the world more like the United States?

Let us take something concrete and picturable. We do not hear our forty-eight "nations," our states, complaining much about lack of access to raw materials. How have we solved the problem? How does Maine get "access" to Pennsylvania coal and oil? And how does it come that Pennsylvania, though herself possessed of some of the richest soil in the world, and taking rank as the leading buckwheat farmer, consumes so many potatoes from northern Maine and far-off Idaho? Is it not due largely to industry, ready transportation, a common currency and exchange, free trade, inventiveness, the democratic way of life?

In the American colonies, at the close of the Revolution, trade had nearly ceased. But during the first ten years after the adoption of our Constitution, the internal commerce of the United States increased by 300 per cent. And from 1837 to 1857, our "golden age," the total wealth of the country quadrupled, while the *per-capita* wealth more than doubled.

When the individual citizens of the Republic of New York adopted the Federal Constitution, they were simply joining a larger self-realization club—for that is what a truly democratic government actually is. They lost no "sovereignty." They gained tremendously in wealth, in security, in freedom to move unhindered from state to state, in many major values.

The economic uplift of a gigantic, democratic, free-trade area, with certain insurance against war, with capital and enterprise given safe leeway for all its initiative, would be incalculable. Business, instead of being conducted in competitive financial systems, with their cumbersome dragbacks of devaluation, exchange ratios and parities, would be carried on in a common currency. Do we care whether it is dollars or pounds, or a combination of the two? Goods are the ultimate. Sugar speaks an international language.

Could we bring about peace by the same inclusive, democratic organization, the world would save a trillion or so of dollars. Figure for yourself on the basis of a hundred-billion-dollar war machine for each great nation and proportionate engines of destruction—"defense"—for the lesser. More: the savings would be cumulative, would go on compound interest as the years passed. The "man from Mars" would want to know what stock we invested in to get such returns. Peace, Mars, Peace Preferred, guaranteed by democratic justice.

What we want, then, is an organization of individuals, of people, for the positive, inclusive purpose of self-realization. Even "liberty," "freedom," is secondary to this. Our American government exhibits one such system, the British Commonwealth another. Surely, we should build on their plan, and neither construct nor revive an awkward, ineffectual league of governments.

Names do not create reality, but they often reveal or conceal it. Our new structure is to be the united democratic individuals of the world. Then we might call it, for short, the United Democracy of the World. The United States, one regrets to say, is not well named. Had all realized that it is a union of individuals, and not of state governments, that the states are secondary, we might have been spared the Civil War. They who favor a "United States of Europe" need to be very clear about what they mean by it, and avoid a mere agglomeration of governments.

If any one wants to know how a union of individuals would work with any problem, let him observe how it is actually working under our own written, or the British unwritten, Constitution.

They who have watched at close range

the League of Nations in action, have shown us clearly why no such instrument can satisfy. It does not serve individual self-realization primarily, but rather the "sovereignty" of governments, the national egotism often called patriotism or even the pride of the ascendant group of politicians back home. Because it must guard the sovereignty of each government rather than the rights of the individual human being, it can not escape the unanimity rule in its proceedings. Yet this form of procedure, as history shows, retarded human progress for centuries, until mankind hit upon that marvelous democratic invention, majority rule. Because of the unanimity rule, a minority may override a majority. Also, league action is too hopelessly slow to prevent war and maintain justice; economic treaties become a practical impossibility, and commerce and finance remain a war-breeding medley.

Because a state government is the unit served by a league, any offender, "criminal," involves, and becomes identified with, an entire nation, and often a powerful nation. Exclaimed the Leader of the Italian people as he proceeded against the Ethiopians: "We will go ahead with the League, without the League or against the League." In any such case, the trial of the "criminal" nation has to precede the arrest; and if penalties are imminent, the warmaker speeds up his machine, as actually happened in the case cited. And these are but a part of the catalogue of evils inherent in such a league.

Again, shall we not make the world more like the United States? If that is our wish, then we must not form "leagues" based on "nations," governments, as units, but a United Democracy of individuals, organized directly and simply for the self-realization of those individuals.

WAR AND THE DECIMAL POINT

By
JOEL H. HILDEBRAND
UNIVERSITY OF CALIFORNIA

While working at school
Jill invented a rule
For coping with decimal fractions.
All those darn little dots
She ignores; it helps lots
With divisions, and sums, and subtractions.

ARITHMETIC, until recently, occupied an unquestioned place in that respected trinity, the "three R's"; a place guaranteed not by any theory of education but by the continual use of numbers by salesmen, carpenters, farmers, clerks, book-keepers, stock-brokers, engineers, chemists, economists and even by occasional housewives. During the past few years, however, there have arisen prophets of a new order, who preach that the ancient trinity is no longer sacred; that its worship is merely "traditional"; that only adding machines, and perhaps engineers, need to know arithmetic. The priests of the old faith insisted upon coercing the individual who rebelled at a hard task, but the new evangelists urge letting the individual alone and changing the task to something easier. It is a very appealing doctrine.

The writer is in a position to see some of the results of this trend in a class of over a thousand freshmen in chemistry in the University of California. All are planning to become agriculturists, chemists, engineers, medicos, miners, physicists and the like, and presumably prepared themselves in school for pursuing scientific studies. The performance of such a class is not lowered by the presence of future poets and philosophers, who admittedly will need little or no arithmetic, not even in connection with their income taxes.

It has become evident while teaching the course for nearly thirty years that the main difficulties of the students have their roots less in chemistry than in English and arithmetic. Perhaps these students can follow a written description of a heroine—I have not tested that—but a description of the structure of an atom is pretty tough for some. In order to arrange them roughly according to ability; to advise them wisely, and to exclude a small proportion of woefully unprepared, we give what we call an "aptitude test" at the time of registration. It makes no pretense of distinguishing "intelligence" from "natural aptitude." It must be short, so as not to hurry them in the limited time at our disposal. Its purpose does not require that it have high "validity." It does serve, however, to reveal some interesting facts.

The following is the test given in August, 1941:

1. $\frac{2}{5} + \frac{1}{3} =$ .....
2. Change $2\frac{1}{2}$ to a decimal. Ans. .....
3. $2/3 \times 10/27 \times 18/25 \times 15/16 =$ ..... (Reduce to simplest fraction.)
4. $0.175 \div 25.0 =$ .....
5. $10^3 \times 10^{-2} =$ .....
6. If $x^2y^3 = 108$, what is y if $x = 2$? Ans. $y =$ .....
7. If $10^x = 0.001$, $x =$ .....
8. How many cubic centimeters are there in a cylinder 6 cm. in diameter and 10 cm. high? Ans. .....
9. How many liters are 2500 cubic centimeters? Ans. .....
10. If 3.0 grams of A unite with 5.0 grams of B to give a compound of A and B, how many grams of A should be taken to give 2.0 grams of compound? Ans. .....
11. What is the per cent. of B in the above compound? Ans. .....
12. If it takes 3 hours 20 minutes to drive 120 miles at an average speed of 36 miles per hour, how long will it take to drive 180 miles at an average speed of 40 miles per hour? Ans. ..... hrs. ..... min.
13. Given the following relations
    $A > B, C > D, Z < Y, X > Y, A = D, Y = B$
    what conclusions can you draw regarding the following (write $>, <, =$ or ?).
    A ..... X, C ..... A, Z ..... C, B ..... Z.
14. Electrically neutral atoms consist of positively charged particles, called *protons*, and equal numbers of negatively charged particles, called *electrons*, together with uncharged particles called *neutrons*. A proton and a neutron have equal masses (weights), which we may call 1. The mass of an electron is so much smaller as to be negligible in comparison. If we call the charge of a proton +1, that of an electron is equal, but of opposite sign, −1; therefore the charges of these two particles, when in the same atom, neutralize each other. If a neutral atom loses one electron its net charge, of course, becomes +1; if it gains an electron it becomes −1, etc.

    Fill in the missing numbers in the following table for four different atoms:

Atom	Mass	Net charge	Numbers of		
			Protons	Neutrons	Electrons
Example	7	+1	3	4	2
a	16	0	8	.....	.....
b	.....	−1	.....	10	10
c	40	+2	.....	20	.....
d	.....	.....	10	12	10

It may be seen that the questions involve nothing but the most elementary arithmetic and algebra. Question 13 involves a common type of reasoning, illustrated by chemical oxidizing power, on the one hand, and by predicting football scores, on the other. The last question is simply a reading test.

The results showed widespread difficulties in handling these simple problems. Over 14 per cent. of the class could not place the decimal point in 4. With the graduates of a certain school this rose to 31 per cent. Sixty per cent. of the graduates of another could not do the simple problem in percentage in question 11. Approximately half of all students could not find the volume of a cylinder, 8.

The results varied enormously by schools, as shown by the following comparison of the percentage of pupils from each getting scores within the ranges given; 24 points represented a perfect score.

Points	0–4	5–9	10–14	15–19	20–24
School A	0	6	11	11	72
School B	7	7	24	27	35

A striking fact about this comparison is that school B is situated in a region inhabited by the "best people," whose children supposedly have the advantages of heredity and wealth. It seems evident that this school is more or less deliberately debauching its pupils intellectually. It is well known that it imposes neither work nor discipline.

Such poor preparation as the test reveals is, of course, a serious handicap to a student headed for science or engineering. It has been excused by asserting that the majority will not require mathematics and that the university rather than the school should give the "specialists" what they need. But now, suddenly, we must see that the nation as well as the individual is victimized by such a practice. Waging war requires millions of workers and soldiers who can use numbers.

I shall not attempt any exhaustive criminological investigations to fix the responsibility for the trouble. There are many causes and no single or simple remedy. It would be an oversimplification to place all the blame in the lap of Progressive education, and I am not writing this article as an attack upon that movement, for some of whose services I am not unappreciative. School B, above, is not classed as a Progressive school. Nevertheless, the twin Progressive doctrines of leaving initiative largely to the child and of shifting emphasis from the despised "subjects," which contain the cultural heritage of the white races, to individual personality and social problems has affected the practices of nearly all schools.

I wish to present the case not by seasoned arguments but rather by means of what may be considered a series of "Exhibits," bearing upon the situation. Let the results of our test stand as *Exhibit A*. Now follow:

Exhibit B. In *Time*, November 25, 1940, there appeared a brief summary of the "Eight Year Study" of the Progressive Education Association, entitled "2,000 Progressive Guinea Pigs." Passing over various items that invite comment I quote only one immediately pertinent to this article. Speaking of the records of graduates of the Progressive schools, we read: "A group of 46 who deliberately avoided mathematics in high school surpassed their classmates in every college subject, including math." I repeat here the questions I asked the chief experimenters when I heard them make this statement in advance of its publication. "Were these students studying calculus in college without the need of high-school algebra and geometry or were they studying these elementary high-school subjects in college at the expense of true college work?" There was no answer then and I have not seen one since.

Exhibit C. In a recent bulletin of the California State Department of Education, "Some Mathematics Practices in California Secondary Schools," one learns that the Santa Barbara High School "reports a tentative plan to make mathematics render its greatest possible contribution to pupils through the core courses. . . . Among the problems proposed for the core courses, which involve mathematics, are these." I quote only a few samples:

> How can we get and maintain better standards of living?
>
> How shall we take care of our senior citizens?
>
> How can we predict business trends?
>
> How can we understand our science-centered world and live securely in it?
>
> How can living be made safer for all?
>
> How can we improve our living?
>
> How can business be improved?

We could hardly expect high-school students to bother about such little things as decimal points while solving these grand problems that have baffled economists and statesmen. It is interesting to contemplate the Santa Barbara of the future in which children will "take care" of adults, and where, if the decimal point is in the wrong place in the family income, it will be a sim-

ple matter to slip it one figure to the right by the aid of stock-market predictions.

Exhibit D. A student at Mills College, Miss Helga Wolski, participated with me in a forum on the general subject of "Education for Democracy" and expressed herself with such wit, force and clarity that I asked her to write a brief summary of her remarks for me to use on due occasion. Here it is.

As a matter of self-defense I should become incensed when people say, "Oh, you went to Progressive school; no wonder you can't add or spell," but I don't. I can not deny it.

My father, who sent me to a Progressive school, tells me that he liked it because we used up so much energy on "projects" that when we came home at night we were too tired to be naughty. This may be true, though I doubt it, but it seems to make education serve a rather peculiar purpose. I believe that a much more beneficial method for achieving the exhaustion for one's children lies in the application of *intellectual discipline.* I believe that education must consist of rigorous academic curricula, and not of the pageants and pabula I have come to know so well.

At college now we have courses in "Self Evaluation" and "Personality Development." I believe very strongly that all this is very wrong. The *purpose* of education can not and should not be the creation of a "well balanced individual" or a "happy member of society." These can only be the *by-products* of formal thinking. It is all very well to create intellectual curiosity and to stimulate eager young minds to creativity, provided that that curiosity *is* intellectual, and provided the eager young minds *know* something to be creative about.

Exhibit E. The director of Relations with Schools of the University of California conducted an inquiry to learn the opinions of students regarding improvements in articulation between school and university. The following are typical of the majority of replies:

High school should be more thorough.

More mathematics and English composition needed in high school.

More home work. High school should raise standards.

Create conditions similar to those students must meet in the university. Apply scientific methods in more subjects. Learn to think accurately.

Too easy in high school. Did not learn to study. University standards much higher.

Exhibit F. The Council of the Society for the Promotion of Engineering Education, meeting at Berkeley, June, 1940, adopted a resolution reading in part as follows:

In various parts of the country there seems to be a movement to postpone and abbreviate the courses in mathematics given in the secondary schools. This movement apparently does not recognize the fact that these courses are essential prerequisites for the future training of scientific and engineering students, and the university has not postponed and can not postpone the mathematical or the scientific and engineering instruction in the university if its graduates are to enter those professional fields. Moreover, at the present time, for our own defense as a nation, it is suicidal not to develop the most thorough kind of training for engineers.

The members of our instructing staff in freshman chemistry have long been resigned to teaching arithmetic. The University of California is now embarking upon an extensive program of teaching mathematics as far as trigonometry and solid geometry—all subjects that I learned thoroughly in high school—as an essential part of our duty to prepare, not only the boys for service in our armed forces and in war-production industries, but also the girls who will have to replace men in factories and even in computing data for artillery fire, as in England. The necessity for this was recently illustrated by a remark made by an officer in charge of anti-aircraft artillery that none of the men under his command had any knowledge of trigonometry. It should be recalled that there are only two aids in hitting a hostile plane, luck and trigonometry, and the former is unreliable.

The citizens have generally agreed to let repentant former pacifists and isolationists sneak back into respectable company without too much notice and consequent embarrassment to them. We may well take a similar attitude toward any of the reformers who properly sober up after the edu-

cational spree they have been on, during which the decimal point has been too small to see, and become willing, with repentant zeal, to get the decimal point in the right place with absolute accuracy, realizing, now at last, that there is a vital difference between 12,000 tanks and 120,000 tanks; between a target at 3,000 feet and one at 30,000 feet; between arithmetic 30 per cent. right and 100 per cent. right.

JOHN A. BROWNING: A FORE-RUNNER OF PROGRESSIVE EDUCATION

By
ALFRED PINNEO
NEW YORK, N. Y.

ONE morning in September, 1890, the writer called at a school on 55th Street, seeking a job as teacher, and there began a long association with Mr. Browning. At that time West 55th Street was largely occupied with private stables. On the site of the Hotel Gotham, stood Saint Luke's Hospital, a semi-rural building with trees in front of it. There were no automobiles to disturb the wayfarer and, except for an occasional runaway horse, the streets were safe and peaceful.

The school occupied a four-story dwelling. Judged by modern standards our equipment was not remarkable, but we lacked nothing really essential.

The Browning School was built upon units of six pupils per class in charge of a single teacher who taught all the grade subjects except modern languages, art, athletics and manual training. There was no provision for music, probably because almost all of our pupils took private music lessons, but Mr. Browning often said he wished he could sing so that morning assembly might be started with a rousing song.

Each teacher was given considerable latitude in the use of methods, consonant with the general plan, and was encouraged to exert his ingenuity in presenting "dry" subjects. Our principal was a tireless worker and yet not a driver because his tremendous enthusiasm was so infectious that each teacher became his own driver.

Perhaps I can best illustrate Mr. Browning's Progressive Method of teaching by taking as an example the way he handled that most kicked-about and abused study in the curriculum—Latin. It is obvious that one can't read Latin if he doesn't know what the words mean, or has not thoroughly mastered the inflections. My class had gone through the paradigm of "bonus, -a -um" for some days with little result except to make the pupils weary and rather hopeless. The next morning Mr. Browning entered the classroom with a stop-watch in his hand, and announced that he was going to run a race—the Latin Derby. Handing me his stop-watch, he asked me to "clock" him while he recited all the cases, numbers and genders of the adjective "bonus, -a -um." At the word "Go" he flew through the declension with a speed that the Tobacco Auctioneer might have envied. I think he did it under five seconds. By this time each boy in the class was begging to be "clocked," and Mr. Browning agreed to give a prize to the boy who could beat his record. The rest of the lesson was hilariously given up to practicing for the "Latin Derby." Finally, I believe, a boy did succeed in breaking the record.

The idea of Progressive education is to bring to bear upon the task in hand some creative, personal or social motive, so that one is carried on and on by the sheer joy of doing things. All the time the pupils are learning, and what one learns by doing he can never forget.

The Project Method of teaching, as far

as I know, originated with Mr. Browning, and in the early 90's was already an established teaching procedure in his school. In essence this method includes the group development of some constructive enterprise, involving study, exploration, research with manual construction and decoration. World history was one of the subjects that Mr. Browning taught personally, using as a text-book "Swinton's Outlines." At first I wondered why he had chosen such a bare and meatless skeleton upon which to build a living structure, but I found out why.

Each pupil was given a notebook in which he recorded the main facts stated in the text in the form of a synoptic outline. These might cover a short chapter. Then the pupil expanded, illustrated and enriched these data by means of what he had read, collected or otherwise learned. The notebook finally contained maps, photographs, prints, drawings and decorations obtained from a variety of sources. It thus became a work of art and a personal manuscript of all that the pupil had been led to discover for himself. Thus Thermopylae, Marathon and Olympus became not only proportionally placed in the setting of the world, but also inspirations and points of departure for an expanding consciousness of things that are much more than they seem.

Mr. Browning seemed to sense the coming importance of science as the transformer of life. However, in the early 90's Einstein had not yet arrived, the Quantum Theory was unborn, and no one dreamed of protons, electrons, radium or vitamins. But Edison had begun his transformation of home lighting and Roentgen had discovered the mysterious X-Ray. We still looked up to Faraday, Tyndal, Crooks and Sir Oliver Lodge as the light bearers of science.

Mr. Browning reverenced these great men and, as far as equipment permitted, repeated some of their epochmaking experiments for his pupils. Among these were Foucault's Pendulum and the bursting of a barrel of water through the pressure of a thin column of water 45 feet in height. Experimental science in secondary schools was greatly influenced by the performance of the famous "Harvard Forty Experiments in Physics." These became part of our regular science course and produced a profound impression. We employed largely homemade apparatus, and I recall the thrill of being delegated to assemble this material and conduct the experiments for the class. Thus the Harvard experiments helped to introduce the laboratory method of teaching science in secondary schools.

Perhaps as a result of the Harvard experiments a course in general science was provided for each grade class in the school, covering: (1) minerals, their identification, collection, classification, occurrence and use; (2) the animal world, including characteristic groups from amoeba to man; (3) the chemistry of common things, testing foods for starch, grape sugar and other elements. This science course was related with field excursions, the study of plants, and especially excursions to factories and studies of industrial procedures. All of these studies entailed the keeping of adequate records, and when of real importance, they were made the subject of the formal school compositions, the best of which were often published in the school paper.

Teachers in the school were encouraged to keep abreast of the times not only through personal study but by availing themselves of whatever educational courses were offered by colleges and professional schools. Fifty years ago such courses were few and far between. The Glens Falls Normal Summer School introduced the writer to such inspiring men as Dr. Hinsdale in history and the botanist, Norman

Apgar, whose "Trees of the Northeastern United States" is still a living text-book. At Glens Falls we also studied Sully's "Psychology," but in that day psychology was purely a "descriptive science," and this is only another way of saying that it was not science at all, but merely a collection of opinions of what people *thought* took place in the mind. Sully, however, did say that the will and the emotions were quite different. From this it was a relief to escape to Columbia University, and begin some real experimental studies under Professor Cattell.

The modern philosophy of education was still to be formulated by Dewey, Thorndike and others, but we diligently studied Comenius, Pestalozzi, Herbart, Froebel, Spencer and William James. Among practical educators we availed ourselves of the writings of Horace Mann and Colonel Francis W. Parker. Parker's "Quincy Methods" was in a sense the gateway to Progressive Education. I must confess that it is a good many years since I studied the "Quincy Methods," but as I recall the book, it consisted largely of anecdotal reports made by one of his teacher-students when Colonel Parker was superintendent of schools at Quincy, Massachusetts. The value of the Methods lay in changing the emphasis from the teacher to the pupil and showing that we must explore the needs and mental processes of the child and adapt our instruction accordingly. This was no mean contribution to education.

Though the Binet Tests were not published till some years later, it is interesting to note that Mr. Browning seems to have anticipated them. About 1892 we were using in the school what were called "mind tests." Chiefly they were devices to test the memory or the rate of learning and consisted of: (1) groups of unrelated words; (2) lists of nonsense syllables, and (3) related thoughts (the number of lines of poetry a pupil could memorize in a given time). Then a correlation was attempted between these results and the results attained by information tests in various school studies. From these we arrived at an index figure of the general ability of each pupil tested, and this figure corresponded pretty well with the conclusion reached from formal examinations and school records. The only trouble about *such* an index lies in the fact that the number of pupils tested must be very large and the tests should be standardized in accordance with statistical procedure. Needless to say, we could not meet these requirements, but the attempt was an indication of the way in which Mr. Browning seemed to sense coming needs and tried to meet them.

In the old days all schools were autocracies—the head master was practically absolute. But the wiser leaders did not rely solely upon this power to *enforce* discipline. Mr. Browning was kindly, sympathetic and unselfishly devoted to the welfare of his pupils. Boys are not slow to learn this, and they respected and loved him, though he could be stern and severe when he considered that a vital principle was at stake.

The study of English was centered upon observation, original composition and illustration. To afford material for such work pet animals were kept in the class "zoo"—a pair of flying squirrels, rabbits and Peter, a tame crow. Although Peter could not talk he was very amusing, and sometimes mischievous. His delight was to steal pencils and other objects that he could carry off and hide ingeniously in the most annoying places. He finally came to a tragic end through drinking ink. One can readily see that the antics of these pets provided abundant opportunities for the pupils to observe, and to write and illustrate their compositions by original drawings.

In the early 90's manual training was beginning to be introduced into such pro-

gressive schools as Pratt Institute and Teachers College, Columbia University. But there were practically no teachers properly trained to handle this subject. To meet this situation Mr. Browning got hold of a clever Yankee carpenter to whom he imparted his ideas, and together they laid out a course of training that proved very successful. Shop work occupied a required place in the curriculum, and to this was added later on a course in turning both for wood and for metal.

About this time, Dr. Sargent began at Harvard his pioneer work in physical education, and Mr. Browning was quick to see that such education could profitably begin long before young people go to college. Besides the daily period for each class in the gymnasium the school took part in extramural contests including baseball, basket-ball, hockey and the yearly track meet with the Simms School. Football was hardly a secondary-school sport in those days. At any rate we had no football team.

Debates between groups of students are now an important part of the college curriculum because they provide for the profitable employment of a number of abilities. They give opportunity for leadership, sustained effort, research, study, English expression, both written and oral, argumentation, oratory, personal development and class incentive. But until Mr. Browning initiated them, debates in secondary schools were, as far as I know, little used. I recall one of the earlier debates on the question: "Resolved, that the steam engine has done more for the progress of mankind than the printing press."

By those who knew him and worked with him, Mr. Browning was considered a great teacher. But what we could not know then has since become very plain; namely, that he was not only a remarkable teacher, but a far-seeing and progressive educator, because the very things that then seemed so strange and even startling to us have now become the cardinal principles upon which Progressive education is built.

Among Browning School alumni are two professors at Harvard University, a professor of mathematics in Princeton, a former U. S. Secretary of the Treasury, an official high in the national war councils, a U. S. Senator, a former Minister to Romania, besides editors, writers and men prominent in the world of affairs. Several schools have been founded by former teachers in the Browning School, the most prominent perhaps being the Calvert School of Baltimore, and the present Browning School in which Mr. Arthur Jones is carrying on the traditions and the good work begun by Mr. Browning more than half a century ago.

Haec olim meminisse juvabit.

Events . . .

A SUMMARY OF WAR ADJUSTMENTS IN THE COLLEGES

THE annual convention of the American Association of Collegiate Registrars was held in Chicago, April 14. At this meeting Arthur F. Southwick, representing the College of Wooster (Ohio), read a paper, "The College and the War," in which he reviewed the "acceleration movement" and "the setting up of courses dealing with war aims" in colleges since the attack on Pearl Harbor—the indorsement of the movement by committees of the American Council on Education, the Detroit resolutions to increase requirements in physical education, the recommendations of the Baltimore college-and-university conference, the reactions against acceleration and so on. "Acceleration," Mr. Southwick concludes, "was the word for the first two months after Pearl Harbor." Then the question, "Why the hurry?" from many sources

began to stem the tide of headlong haste in meeting the war emergency. The conflict of judgment and action resulted in an effort on the part of the College of Wooster to get, through a questionnaire, "information on calendar, credits, emergency changes and courses in the colleges of the nation."

Of the 187 colleges that replied to the questionnaire, 102 had moved up commencement dates from one to five weeks; 148 will hold summer sessions varying in length from eight weeks or less to 15 weeks or more, and many colleges, "even with the short sessions," have announced that students may win their degrees in three years or less.

As to the trend toward the "quarter system," replies indicated that it is not yet popular. Only six of the 16 arts colleges using it have adopted it within the past two years; along with the land-grant universities, they are still "three to one in favor of the semester." The system is more popular in teachers colleges, but this is "true to form."

The question of admission of high-school students to college before their graduation brought answers showing little interest in enrollees who have not completed their secondary-school work. Of the 120 arts colleges, only 27 replied that they would admit "good students" before graduation, and of 87 teachers colleges, 16 were in favor of admission before high-school graduation. Mr. Southwick thinks these figures should be scaled down because some institutions perhaps had in mind the admission of mature students "who merely lacked technical requirements." Of the 43 of both types, one reported 12 units as the minimum requirement; nine, 14 units, and twenty, 15 units.

The awarding of the B.A. degree at the end of the sophomore year, as suggested by President Hutchins of the University of Chicago, has not been favorably regarded by the arts and teachers colleges. The "only significant change in graduation requirements is that 28 arts colleges and eight teachers colleges will now require more physical education." These figures again surprise Mr. Southwick, who thinks the colleges may be waiting for some program combining physical and military training.

Credit for military service is allowed seniors who leave before graduation by 20 colleges (8 arts and 12 teachers), the majority of them requiring examinations of the student at the time of leaving. Four institutions "offer credit to the soldier or sailor through correspondence." Pre-induction training will be given in only five colleges; 29 will expand the Civilian Pilot Training program.

Decreases in enrolment are expected by most institutions, but this matter waits upon the unfolding of the drama of war, and, Mr. Southwick points out, the "very existence" of many colleges will depend upon the policies of the Selective Service administration. College fees, meantime, are "on the way up."

In conclusion, Mr. Southwick observes that educational institutions "hold a key position" in the winning of the war and must face the responsibility not only of supplying trained manpower for every essential service and of maintaining morale through trained leadership, but of creating, through the teaching of social studies, an enlightened public opinion as to the issues involved in this war.

FEATURES OLD AND NEW IN SUMMER SESSIONS

THE "speed-up" program in colleges and universities has become an old story, but as new slants on the scenes of war develop and new needs for trained personnel become acute, education is on the alert to perceive where a shortage exists and, as far as possible, to redirect and readjust its programs toward the saving of the situation.

The School of the Boston Museum of Fine Arts is a notable case in point. It will hold "a war-time summer school," which not only will provide accelerated courses for beginners in art, but, as announced by Russell Train Smith, head of the school, will train lithographers, called for by the Civil Service Commission; camofleurs, in great demand since the advent of the airplane photographer; draftsmen; map-makers, and other personnel for service in the war crisis. George Harold Edgell, director of the museum, will give a series of lectures on the history of Renaissance and modern art, and the summer-school outdoor drawing and painting classes will "provide a welcome substitute for the summer art colonies, many of which will be wiped out by the progress of coastal defense."

At the University of Chicago summer quarter, there will be workshops in both elementary and secondary education for the benefit of teachers who bring problems to be solved under the guidance of experts. A course for counselors, school psychologists and the like on human development, involving the study of "the physical and cultural forces that shape human nature as well as human growth and development in relation to the learning process," will be given at the same time—during the first seven weeks of the quarter. A workshop in junior-college terminal education for the staffs and administrators of junior colleges in cooperation with the Commission on Junior College Terminal Education of the American Association of Junior Colleges will run from June 23 through July 25; and one in general education for college staffs, from August 1 to September 12. There will also be a number of institutes and conferences on educational problems, such as those presented by officials of higher institutions, administrators of public and private schools and personnel workers.

The School of Social Service, Fordham University, will offer summer courses in social work leading to a master's degree as a "first step in the accelerated scholastic program of the school." It will now be possible to complete in 18 months what formerly required two years. The flexible two entrance dates, June and September, have been adopted by the university, and the "same basic study and training of the two-year plan" will be packed into the more intensive 18-month program. The university recognizes the "vast need" that has been created by the war for trained personnel, whose value to social-service agencies now and to "mankind the world over" in the post-war era is "priceless."

The June and September entrance dates have also been adopted by Berea (Ky.) College. Those matriculating in June must enroll for twelve weeks, an arrangement that will not only accommodate the individual seeking a speed-up program but extend the use of the facilities of the college and integrate the summer work with that of the academic year. Berea's well-known plan of dividing the day between work and study will affect all regular students this summer—an innovation that will require from ten to twenty hours of labor a week. In response to the national emergency a number of new courses will be available: in addition to the four-year training course for teachers a two-year program has been inaugurated leading to the provisional elementary certificate; a two-year secretarial-science course will be offered in the department of economics and business, designed to give not only technical skills but adequate knowledge of the business field; a twelve-week course in radio, in spite of a $25 fee for materials, has already a large enrolment; registration in the regular three-year course offered by the Berea College School of Nursing, one year of which is spent in the Cincinnati Hospital, is being held open past the "usual March first deadline" because of the nation's need for well-trained nurses.

Columbia University will conduct at Barnard College a new summer session for undergraduate women students. Virginia C. Gildersleeve, dean of the college, said in explanation:

> Young women just leaving the secondary schools are . . . eager to serve the country and do not want to spend the summer in idleness. If we do not catch promptly the ones with good brains and start them on the college work, they may be led off permanently into the less intellectual pursuits. . . . The potential physicists, chemists, bacteriologists, statisticians and economists . . . must be kept at their studies.
>
> Training will be given . . . in trigonometry, analytic geometry and differential calculus—essential to so much of the scientific and engineering work required by the nation. Regular first-year classes in inorganic chemistry, biology and zoology will also be given. The great demand for linguists . . . has led to the inclusion of courses in French, German and Spanish.

THE 1942 INSTITUTE FOR ADMINISTRATIVE OFFICERS OF HIGHER EDUCATION

AT the University of Chicago, July 8–10, administrative officers and faculty members of universities, liberal-arts colleges, teachers colleges and junior colleges will hold their 20th annual institute, the theme of which will be "Terminal and Professional Education." The university will act as host; no fee is charged for attendance. Printed programs may be obtained from John Dale Russell, professor of education.

The morning and afternoon sessions, July 8 and 9, will be devoted to the program of terminal education: the needs and resources for terminal education, with emphasis on procedures; specific problems of terminal education, its administration and evaluation in particular; various types of terminal education, including technical, commercial, homemaking and consumer education.

Both sessions, July 10, will deal with the readjustment of higher education to wartime demands—"the issues involved in institutional readjustments, the problem of education for the understanding of national issues, the curriculum adaptations growing out of the new V-1 plan of the U. S. Navy and descriptions of readjustments at individual institutions."

Papers on the program of the institute will be presented by William H. Conley, dean, Wright Junior College (Chicago); E. D. Cornelison, director, School of Trades and Technology, Pasadena Junior College; Edward C. Elliott, president, Purdue University; Mark Ellingson, president, Rochester Athenaeum and Mechanics Institute; Max D. Englehart, director, department of examinations, Chicago City Junior Colleges; B. Lamar Johnson, dean of instruction and librarian, Stephens College (Columbia, Mo.); Joseph S. Kopas, director, testing and guidance department, Fenn College (Cleveland); T. R. McConnell, dean, College of Science, Literature and the Arts, University of Minnesota; Earl J. McGrath, dean of administration, University of Buffalo; Lester Schloerb, director of occupational research, Chicago Board of Education; Leo F. Smith, coordinator, Study on Cooperative Work Programs, Rochester Athenaeum and Mechanics Institute; Ivol Spafford, Rock Creek (Ohio); William P. Tolley, president, Allegheny College, Meadville, Pa. The university will be represented by Clarence H. Faust, dean of the college; Leonard V. Koos, professor of secondary education; Hazel Kyrk, professor of home economics and economics; John Dale Russell, professor of education; William H. Spencer, dean, School of Business.

THE FRENCH SUMMER SCHOOL AT TROIS-PISTOLES, QUEBEC

THE University of Western Ontario, with the purpose of "bridging the gap between classroom work in French and the practical use of the language in everyday life," opened in July, 1933, the summer school at Trois-Pistoles, on the south shore of the St. Lawrence River on the route to the Gaspé country in the Province of Quebec. Succeeding sessions have drawn students from all parts of North America. Not only have they found instruction in the language competent and serviceable in securing "business and teaching appointments," but they have enjoyed the scenery and sports of an "old-world region still largely unspoiled." The school is intended primarily for undergraduate students, but teachers and others are admitted. A full year of French at a university is required of students who wish to secure credit. The fees range from $25 to $45 in addition to the $5 registration fee; board is from $7 to $9.50 a week. Classes are held daily except Sundays in the local convent. The session runs from July 2 to August 26. Further information may be obtained from the director, addressed at the University of Western Ontario, London (Ont.), up to June 23 and after that at Trois-Pistoles, Co. Rivière du Loup, P. Q.

The bulletin announcing the Trois-Pistoles school seeks to correct the impression that French spoken in Canada is "little better than an unintelligible patois,"—an impression that has obtained among tourists because the average traveler deals with "farmers, guides and small shopkeepers." The educated classes of French Canada, however, regard their tongue as "a precious heritage" and "speak French of a charming quality."

TOUCHING THE INDIANS OF THE WESTERN HEMISPHERE

The Christian Science Monitor of April 25 carries a thought-provoking article on the Inter-American Indian Institute, which has emerged from its formative stage to "permanent structure and status" as an international organization of no small significance. While the lawless forces of the world are engaged in brutal destruction of liberty and civilized standards of living, the Inter-American Indian Institute proposes a vigorous program for ameliorating the condition and raising the standard of living of the 30,000,000 Indians of the American hemisphere and acquainting the modern age with a

people whose present position is due to exploitation and neglect but whose ancient culture is well worth study.

The governing body of the institute, during a meeting in Mexico City, March 25–31, elected as its president John Collier, U. S. Commissioner of Indian Affairs, and Manuel Gamio, well known Mexican anthropologist and sociologist, as director. The governing body at this meeting was made up of seven members, each representing a participating government, as follows: Joaquin Cisneros Molina, Secretary General of Indian Affairs, Mexico; J. Edgardo Valenzuela, Minister to Mexico, Honduras; Hector Escobar Serrano, Minister to Mexico, El Salvador; Mr. Collier, the United States; Luis Robalino Davila, Minister of Ecuador; Lorenzo Guerrero, Minister of Nicaragua; Tomas C. Perrin, Consul General of Paraguay. The action of the body carried out a recommendation of the eighth International Conference of Inter-American States meeting at Lima (Peru) in 1938 to establish the Inter-American Indian Institute.

In April, 1940, the first Inter-American Indian Conference, held in Patzcuaro (Mexico), passed a "resolution authorizing the institute" and "recommended that a convention between the countries toward this end be concluded." The following states have ratified the convention: Ecuador, Paraguay, El Salvador, the United States, Honduras, Mexico and Nicaragua, while Costa Rica, Cuba, Panama and Peru have signed it and await ratification. It is hoped that, eventually, all 21 republics will ratify the convention. The administrative program is in the hands of the various participating governments, and the institute will act as a clearing house for whatever undertakings may be proposed. Such proposals, once in the hands of the institute, will be referred to "national affiliated Indian associations" working with the individual governments.

Mexico City has been chosen as the permanent site of the parent institute. The Indian population of Mexico is over 16,000,000 and, since the revolution of 1910, the government has been seriously concerned with the Indian problem. In some countries Indians form as much as 80 per cent. of the total population, which abundantly explains why the Inter-American Indian Institute is a vital necessity.

Some of the projects adopted by the governing board are: "a census of the Indian population of the hemisphere taken on cultural criteria; a study of Indian food habits with the aim of bettering nutrition, and promotion of arts and crafts which will produce salable objects to replace merchandise formerly obtained from Asiatic and European markets."

Notes *and* News . . .

Appointments, Elections, Resignations, Retirements

Harry S. de Vore, district superintendent of the North Texas Conference of the Methodist Church, has been appointed president, Central College (Lafayette, Mo.), to succeed Robert H. Ruff, who had announced his retirement because of ill health. This number of School and Society reports the death of President Ruff.

Charles E. Burns has been appointed acting president, Milligan College, Tenn.

Ernest A. Johnson, professor of economics, was appointed acting president, Lake Forest (Ill.) College, in February to succeed Herbert McComb Moore, who became president emeritus. The death of Dr. Moore is reported in this number of School and Society.

D. T. Schoonover has been appointed acting president, Marietta (Ohio) College.

G. S. Sanders, chairman of the board of regents of Oklahoma state colleges, has been appointed president, Southwestern Institute of Technology (Weatherford, Okla.), to succeed James B. Boren, who in turn becomes president, Hardin Junior College, Wichita Falls, Tex.

William T. Caldwell, chairman of the department of chemistry, has been named dean, College of Liberal Arts, Temple University (Philadelphia), to succeed James H. Dunham, who announced his retirement the first of May.

Vernon L. Bollman, of the department of physics, has been appointed dean of men, Occidental College, Los Angeles.

EARL EDWIN KLEIN, associate professor of social administration, University of Illinois, has been appointed head of the School of Social Welfare, Louisiana State University.

THE REVEREND DEMETRIUS ZEMA, S.J., has been appointed head of the department of history, Graduate School, Fordham University. Father Zema, who has been professor of history for a number of years, succeeds Jeremiah F. O'Sullivan, associate professor of history, who has become a chaplain with the Army Air Corps.

MAXIMILIAN PHILIP, who has been on the staff of City College (New York) since 1902, has been appointed head of the department of mathematics, to succeed Frederick G. Reynolds, whose retirement was reported in SCHOOL AND SOCIETY, March 8.

W. VANN PARKER, member of the staff of the department of mathematics, Louisiana State University, since 1936, has been named head of the department, to succeed S. T. Sanders, who will retire, June 30.

DANIEL T. O'CONNELL succeeds Bertram T. Butler as head of the department of geology, City College, New York. Dr. Butler's retirement was reported in SCHOOL AND SOCIETY, April 18.

JAMES L. HYMES, JR., editor, *Progressive Education*, has been appointed director, Hessian Hills School, Croton-on-Hudson, N. Y. The school, which was founded in 1925, has been a pioneer in the "exploration of the relation of the school to the social scene."

LAURENCE WOODRUFF, associate professor of entomology, University of Kansas, has been appointed registrar to succeed George O. Foster, who becomes registrar emeritus after fifty-one years as a member of the staff and forty-four years as registrar.

WILLIAM S. LOHR has been appointed to succeed Edward H. Rockwell as director of the division of civil engineering, Lafayette College, Easton, Pa.

ALFRED MCCLUNG LEE, executive director, Institute for Propaganda Analysis, has been appointed professor of sociology, Wayne University, Detroit.

ROGER M. MORROW, who has been head of the department of physics, Iowa Wesleyan College (Mount Pleasant), since 1934, has been appointed associate professor of physics, Albion (Mich.) College.

NORMA ALBRECHT, assistant to the registrar, Nebraska State Teachers College (Peru), has been transferred to the department of commerce as assistant professor, to succeed Marjorie West Hart, resigned.

RALPH J. KAMENOFF, assistant professor of biology, has been named assistant director of the summer session in charge of the School of Business and Civics Administration, City College, New York.

HARRY C. CARVER, professor of mathematics, University of Michigan, who has been serving as a cadet in the Army Air Force since February 7, has been placed in charge of a new course in mathematics at the university. The course, which is designed to help speed up the training of navigators for the air force, will be presented during the first eight weeks of the summer session, beginning June 15.

FRANK H. KNIGHT, professor of economics, the University of Chicago, has been appointed professor of social sciences and will serve as a member of the executive committee in the direction of a new interdepartmental program, "The Study of Civilization." Other members of the committee are Robert M. Hutchins, president of the university; Robert Redfield, dean, Division of Social Sciences, and John U. Nef, professor of economic history. Members of the staff who will give courses in the program are: Mortimer Adler, Henry Simons, Richard P. McKeon, Charner M. Perry, Clarence H. Faust, William T. Hutchinson and Chester W. Wright.

NEIL C. VAN DEUSEN, formerly librarian, Fisk University (Nashville, Tenn.), has been appointed librarian and head of the department of library science, State Normal School, Geneseo, N. Y.

ELIOT JONES, professor of economics, Stanford University, will be a visiting professor during the summer session of the University of New Mexico.

M. L. ROSS, of the medical branch of the Uni-

versity of Texas, will give courses in mental hygiene during the first term of the summer session, College of Mines and Metallurgy, El Paso, Tex.

HERNANE TAVARES DE SÁ, professor of biology, University of São Paulo, and the Faculty of Philosophy of São Bento (Brazil), will be a visiting lecturer at more than seventy-five North American colleges and universities during the next eight months. At each institution he visits, Dr. Tavares will present a "parchment scroll of greeting from the Brazilian universities with which he is associated."

WILLARD W. BEATTY, director of education, U. S. Indian Service, is traveling in South America in the interest of the Rosenwald Foundation. At present he is in Peru and plans to visit Colombia, Guatemala and Mexico.

LIONEL ROY, professeur de droit international et constitutionnel, Ecole des Sciences Sociales, Université Laval (Quebec), will lecture in the United States during the second semester, 1942–43, under the auspices of the Institute of International Education.

THOMAS MUNRO, curator of education, Cleveland Museum of Art, and professor of art, Western Reserve University, has been elected president of the American Society for Aesthetics.

JOHN H. HUGHES, principal of Brookline School, Haverford Township (Pa.), will become supervisor of English in the elementary schools of Puerto Rico.

VIRGINIA WARD, formerly assistant state supervisor of home-economics education, North Carolina, is now serving as coordinator of the family-life-education program in Wilmington, N. C. This is one of four programs the purpose of which is "to unite the efforts of all organizations and agencies in a community toward securing more satisfying home and family life for all ages."

C. G. MADDREY, principal of the Scotland Neck (N. C.) High School, has been appointed to the staff of the State Textbook Commission, to succeed W. F. Mitchell, who has accepted the superintendency of schools, Franklin County, N. C.

HOWARD B. CARROLL, director of the department of mathematics, Taunton (Mass.) High School, has been elected superintendent of schools, to succeed Wendell A. Mowry, whose retirement was reported in SCHOOL AND SOCIETY, April 18.

CARL IGEL, superintendent of schools, Minneapolis (Kans.), has been elected superintendent of schools, Garnett (Kans.), to succeed C. H. Oman, who has retired after forty-five years of service.

L. W. ST. CLAIR, superintendent of schools, La Grange (Tex.), has accepted the superintendency at Georgetown, Tex.

B. C. PIERCE has been elected superintendent of schools, Mount Pleasant, Tex.

Recent Deaths

JAMES D. TOOLE, assistant superintendent of schools, Schuylkill County (Pa.), died, May 3, at the age of forty-eight years. Mr. Toole, who was appointed assistant to the superintendent in 1929, had been active in the interest of teachers throughout the county, especially those in districts in which salaries were low. Through his intervention with Governor James, funds to alleviate conditions in these districts were made available by the state legislature.

HARRY RICHARD UNTEREINER, superintendent, Hudson County (N. J.) Parental School, died, May 3, his fifty-eighth birthday. Mr. Untereiner had gained a nation-wide reputation as an authority on juvenile delinquency, having introduced "reforms that made the county institution a model for similar places throughout the country." He had served the school for over nineteen years.

ROBERT HAMRIC RUFF, president, Central College (Fayette, Mo.), died, May 5. Dr. Ruff had devoted the early years of his career to service in the Methodist Episcopal church. In 1927, he accepted the presidency of Morris Harvey College (Charleston, W. Va.), a post that he held until he went to Central College, 1929. Dr. Ruff was in his fifty-fifth year at the time of his death.

CLYDE LECLARE GROSE, professor of history and chairman of the department, Northwestern University, died, May 6, at the age of fifty-three

years. Dr. Grose had served as an assistant in history (1914–16) and as Parker fellow (1919–20), Harvard University; as instructor (1916–19), assistant professor of history (1920–23), associate professor (1923–31) and professor (since 1931), Northwestern University.

THE VERY REVEREND HENRY JOSEPH SCHROEDER, O.P., subprior and professor of languages, Dominican House of Studies (River Forest, Ill.), succumbed to a heart attack, May 7, at the age of sixty-seven years.

HERBERT MCCOMB MOORE, president emeritus, Lake Forest (Ill.) College, died, May 7. Dr. Moore had served pastorates of the Presbyterian church in Goldfield (Colo.), 1901–03, Milwaukee (1903–06) and Appleton (Wisc.), 1906–12. He was university pastor at Cornell University (1913–17) and with the YMCA, University of Pittsburgh, 1918–20. He became president at Lake Forest College (1920) and served in this capacity until his retirement last February. Dr. Moore was in his sixty-sixth year at the time of his death.

ST. CLAIR SLOAN, alumni professor of modern languages, Randolph-Macon College (Ashland, Va.), died, May 10, at the age of sixty-seven years. Dr. Sloan, who had served as assistant professor of Spanish at the University of North Carolina, went to the college in 1930.

Other Items of Interest

Education Abstracts, published until April, 1942, by Phi Delta Kappa, under the editorship of Paul M. Cook, will henceforth be under the editorship of William W. Brickman, of New York University, and his associates, Reginald Stevens Kimball and Abraham I. Katsh, of the university, and Jacob I. Hartstein, of Yeshiva College and Long Island University. Mail should be addressed to W. W. Brickman, *Education Abstracts,* 32 Washington Place, New York City.

RHODE ISLAND STATE COLLEGE will celebrate the fiftieth anniversary of the founding of the college and will inaugurate Carl Raymond Woodward as its fifth president, Saturday, May 23. The historical address will be given at the anniversary convocation by Harold W. Browning, professor of botany at the college.

THE best letter of approximately 500 words on "Where I Should Like to Go on My Vacation This Year—and Why" will receive the first prize in the 1942 Travel Contest, sponsored by *The Instructor,* the closing date of which is June 10. Awards will be made July 1. Teachers and any one engaged in administrative or secretarial work in the schools may compete. Details of the contest may be obtained by writing to W. D. Conklin, Travel Editor, *The Instructor,* Dansville, N. Y.

Shorter Papers . . .

PROPAGANDA AND THE TEACHER

WAR requires action but it does not necessarily destroy all reflection. Many teachers will reflect upon and reconsider the nature of propaganda. During the twenty-year interval of peace one of the rôles adopted by the teacher in this country was that of analyst. As such, he was interested in disinterestedness with a passion for dispassion. He imagined he could assess the attitudes and motives which lay behind the observed behavior of his fellows. Supported by the research scholar, it was easy for the teacher to regard himself as a general over an army of facts. But in order that he might not be called a propagandist he maintained that the facts spoke for themselves. Hoping that he himself might not be singled out as a special pleader, he was diligent in analyzing the propositions of others. In recent years the teacher has heard much about the agencies of communication being endangered by the subtle and subversive machinations of propaganda. The exorcism of this monster was to be made possible by the scientific analysis of its nefarious devices. The threat was somewhat lessened through the study of propaganda techniques. But in advocating counter-propaganda, the teacher himself undertook to spread a procedure. He was a propagandist.

The teacher does not absolve himself from the rôle of a propagandist because he attempts to explain propaganda techniques. Moreover, in his explanations he has become involved in the vague areas of human motivations and incentives, and in his desperation he sometimes turns to the customary imputation of selfishness and

egocentricity in those around him. The teacher has yielded often to the temptation of sponsoring individualism and self-realization as social goals. In so doing he has been a propagandist, perhaps for toleration, or self-expression, or even laxity.

But seldom has the teacher been an anarchist. He believes in social order and functions best where it prevails. So, in many cases, he has gone out for social planning. It has appeared that individual values could best be preserved by planning, even imposed social planning. These plans could best be worked out by the scientist, and best articulated and brought to fruition through the educational process. The social-science teacher, in particular, has put forth a great deal of propaganda in favor of social planning. Incited by his belief in the possibility of a better social order, he has sought to inspire his students.

After all, the teacher *must* be a propagandist. Surely he must advocate something! It might even be said that the good teacher is the good propagandist. Most likely he seeks to contribute to a better way of doing things or a better way of living together. He makes the facts speak the truth as he sees the truth. As the implications are plain to him he must try to make them plain to others.

In these days of international warfare, the teacher should not delude himself into thinking that he does no more than place facts before students. He is a propagandist for the truth as he understands it. He does not have to be subversive or dishonest to be a propagandist. He may be a good one, or a bad one. But whether he intends it or not, the teacher is a propagandist, both in peace and in war. A recognition of this may prevent confusion and remorse. The teacher must continue to seek the way with the light that he has. Probably his conclusions will not stand forever, but there will be no disillusionment if he acknowledges his rôle as a propagandist. The exposition of the truth as seen by the sincere teacher is the best of all propaganda. In time of war, our country must rely upon the teacher for the maintenance of excellence in national morale.

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THE DECLINE OF THE TEXT-BOOK IN COLLEGE COURSES

A COLLEAGUE teaching education in a Chinese university once told me gleefully that in class he asked questions but never answered them! The mystification of his students was his delight. Thus it was that he claimed to make them think! Settled conclusions were dangerous, for might they not interfere with the continuous reconstruction of experience? Better to learn nothing than allow one's learning to interfere with one's education. Process is safe, but beware of goal.

If this attitude were confined to a single case its futility might well be forgotten. Unfortunately, however, it is but a single case of a kind which floods the land. One of the most serious forms which this failure is taking in universities from one end of the country to the other, is neglect of the fundamental text-book in courses which depend for their validity upon organized basic subject matter. It is thus pertinent to ask if we are witnessing the demise of the old fashioned text-book for college use.

It is to be feared that the newer neglect in the use of books has come from the practices of those who teach education. It is easy to understand how the deviation arose. Education is not a subject. It is an activity, a process. The teacher of education is, like the sociologist, an interloper in the standard college organization. His work poses a new principle, a principle of action, of living. This principle, *when used as a basis of organization,* conflicts with the logical principle upon which the traditional college structure was built. The teacher of education must be all things to all men. His "subject" overlaps and intrudes into the fields of his colleagues. It is in terms of the old structure impertinent. In some senses it undoes what other teachers are doing. The true teaching of education is based on practice, and is coordinated with acting, the doing of learners, with model schools, experimental schools and practice teaching. But in order to find entrance, in order that the camel might get its head within the tent, education posed as a "subject." Its fate was thus to be taught as a subject in order that it might fit snugly into the college scheme.

Firmly ensconced as a subject in the modern college, education now began to assert itself. It began to fall under the modification inherent in its own nature. Inveighing against "subject matter" the teacher of education fell into his own net. He was hoist with his own petard. Talking incessantly of "activity" he must have activity in his class. Talking against "subject matter" he must be suspicious of it in all its forms. Thus out goes the text-book and in comes the discussion, question-box, comparison of concepts, socialized recitation, panel and what not.

In his enthusiasm, however, the teacher forgot some things. He forgot the simple fact that talk is talk. To talk about nothing is to say nothing. To say nothing, even in a discussion, is to teach nothing. Had he abandoned the sinking ship completely and substituted, for part of the "talk" classes, work in crafts, social surveys, club work, teaching practice or any of a number of forms of student activity, he might have fulfilled his theory. Study would soon have resulted from the embarrassing necessity placed upon one by action. One must read, study and know in order to *do* well. But one may talk incessantly and remain in ignorance! See a myriad classrooms in a hundred colleges.

Now had the teacher of education been just a little more careful in applying his theories, he might have realized one thing. With more active forms of teaching denied, subject matter, in the sense of information and the thinking of others, is an inevitable basis for teaching and learning. He might have realized that written and spoken words are a form of action and that when so used they become alive. He might have realized that one sound, careful, written presentation of facts, thoughts, information and techniques is worth a thousand fits and starts in diverse and distant paragraphs. Failing to realize this, however, the teacher of education fell into an error for which he was already prepared by the technique used by some of his teachers in the graduate school. Certain graduate teachers of philosophy have specialized in "scraps."

It is important to realize that the field of philosophy of education proper is a special case. There is no one philosophy. There can be no one text-book in philosophy to the exclusion of others. In the field of philosophy of education, as long as the teacher keeps to fundamental themes such as personality, curriculum, teaching, learning, experience and the unity of experience, orderly progress may be made. In such teaching it may be valid to study a series of excerpts provided that the teacher is sufficiently skilful in enabling the student to weld them into something orderly. But even here, basic study is necessary. Excerpts collected or scattered in many texts must actually be studied before they can be used. Even here discussion must be discussion of something. It must be based on the thinking or experience of others. Books of excerpts may here be valid as texts, and lists of books may (if the books are read) be a valid substitute for a single text.

In different fields it is far otherwise. How unhappy is such a procedure in the field of technique or method. How absurd such a plan in a course in the history of education. Here definite information, knowledge and skills are involved. If they are to be used they must be learned. The student who studies techniques needs an organized fundamental account which he may study and master. It should be the best account that he can get. He can not possibly read ten books on the subject. He can not possibly get an organized outlook by sampling and never mastering bits of technique picked up here and there. He can not master questions of method in teaching arithmetic if he confines himself to fractions. Nor can he make himself proficient by reading five books on the teaching of art to children and reading nothing about the teaching of science, which is equally required of him. If he is to be a general technician he must know technique in every direction. Would that there were one tenth of one per cent. such finished teachers in the land to-day. We have a land full of teachers virtually untrained in technique and method and stuffed full of philosophical abstractions which they can not apply. Technique is not won merely by reflection or discussion but by analysis, information and practice. Nor can such a wordy subject as history of education throw light on current practice unless students become acquainted with the story of it. After students have studied one good

text-book in such fields they might burn the rest. But until a student has studied one such basic text he lacks the stem from which come the branches.

Teachers of education, and of many other college courses, academic and vocational, should think twice before they abandon the single text, owned, read and studied by the student. Such a book may then be well supplemented by lists of additional references, from which students may choose different materials according to individual needs. The plan, which has become so common, of providing students with nothing but a long list of books, generally undermines the validity of group teaching. The injunction to read widely and at random digs many a pitfall for the student. Libraries are magnificent institutions to enrich knowledge. But as a source of simple, basic and fundamental information they do not work well. In a field in which students are learning fundamentals, the practical situation demands the use of a basic text away from the library. Only thus can a group of students actually secure a common core of reading experiences which they may use to supplement one another's learnings by wider reading and group discussion.

Loose practice among college teachers in the use of lists and excerpts for library reading is widespread. It has very unfortunate results upon the publication of text-books suitable for student needs. Text-books in education must meet but low standards to get publication today. All that is necessary is that the writer do a routine job of compilation, keying his performance to some widely established "course." A large number of educational publishers are open to carry a complete "line" of texts. Under such circumstances it is clear that many mediocre texts reach the market. This poses a double dilemma. The teacher can not afford to buy all and study out which is best. He often gives up the search, compiles a list of twenty books and turns the student loose to solve the problem he himself has found too complex and cumbrous. Needless to say, the student fails to solve it. He wastes much time in mechanical search. In many cases he reads a part of a mediocre book because the best books can not emerge from the plethora of publishing. Publishers find it profitable to issue a barrage of new texts with new date lines. They thus hope to cover the loss of sales through adoptions by flooding the libraries with single copies. The publishing of poor texts is virutally forced upon them by the lack of professorial discrimination. So is reduplicated the careful teacher's problem of finding a good text worthy of basic adoption for all his students. An unsatisfactory beginning makes here an unsatisfactory ending. There is an inbreeding of ineffectuality.

Worst of all, these dull practices are blamed upon "modern education." Those who fight the hardest for careful, well-developed, modernized technique and method are asked to bear the brunt of the criticism. Progressive education is not the sloppy practices of the sentimental and the untrained. It is a hard, relentless series of superior disciplines. Certainly it is that or it is rubbish. Surely there is bad practice and ignorance and laxness and lack of technique among modern teachers, just as there has been among teachers of every era. We have too many teachers-college products who have had but a smattering, learned by this very process of lackadaisical and half-hearted reading. It has filled them with fears. They are aghast at such bogeys as "subject matter" or "discipline" or "lack of spontaneity." They have not learned Lancaster's injunction—a place for everything and everything in its place. A place even for the core text-book.

A. GORDON MELVIN

THE COLLEGE OF THE
CITY OF NEW YORK

Societies *and* Meetings . . .

PHYSICAL FITNESS

THE 47th annual convention of the American Association for Health, Physical Education and Recreation brought together in New Orleans, April 15–18, nearly a thousand representatives of the varied fields devoted to achievement and maintenance of sound bodily health. The theme selected for the conference by its president, Ann

Schley Duggan, Texas State College for Women (Denton), was "National Fitness Through Health, Physical Education and Recreation." Teachers of health; directors of physical education; physicians; nurses; psychiatrists; supervisors of recreation; teachers of the dance; directors and advisers of camps for young people; specialists in orthopedics, therapeutics, mental hygiene and dentistry; coaches of athletics, and officials of agencies, federal, state and local, concerned with physical development participated in convention programs. The general sessions of the convention were preceded by a three-day conference on the modern dance, accompanied by demonstrations of various types of the terpsichorean art.

The role of health in wartime was emphasized in most of the meetings. Louis R. Burnett, M.D., director of health and physical education, Department of Education, Baltimore, sounded this keynote at the first meeting of the administrative directors as the convention opened:

> This Liberty War has brought forcibly to the attention of public-school superintendents and administrators of health education the need for changes in the curriculum. For years we have known that students were leaving school with physical handicaps. More girls and boys were graduating and the average weight and height of these diploma winners gradually increased. These conditions gave a false impression concerning health and strength, for increased weight can be flabby fat due to sitting behind an auto wheel or listening to a radio rather than engaging in vigorous outdoor games.

Dr. Burnett took issue with a recent statement of the Metropolitan Life Insurance Company that "the American people can definitely be assured that the charge sometimes made, that 45 per cent. of our young men are physically unfit, is entirely unfounded." He pointed to statistics of rejections for physical unfitness by selective-service boards and called attention to a survey in the public schools of a large city which showed that 2,065 remediable physical handicaps were discovered by the annual examinations of school physicians among 3,015 graduates in a single year. He found additional evidence of decline in physical stamina from the fact that "the average records for the pull-ups, the short dash, the rope climb or a target throw are considerably lower than those made twenty years ago. Agility as shown by performing simple tumbling exercises is less, posture is poorer, the muscles of the shoulder, girdle and arms are flabbier in the average boy."

Other speakers at the convention supported a position diametrically opposed to that of Dr. Burnett. Among them was A. C. Flora, superintendent of schools, Columbia (S. C.), who reviewed "Health in the Schools," current *Yearbook* of the American Association of School Administrators. Superintendent Flora, a member of the commission that prepared the volume, selected for his subject "The Schools Challenge Accusation That To-day's Youth Are 'Softies'" and urged that,

> The schools of this nation should deny and explode the false doctrine of the poor health status of present-day American youth due to a lack of teaching health. Much is being written and spoken today in indictment of the physical condition of the young people of America, with citations from what on the surface appear to be legitimate statistics.
>
> One very widely circulated comparison is based on the draft rejections of this war and the last, which some have interpreted to show that our boys have become softened, unhealthy individuals.
>
> Such comparisons are usually with no valid support if all the factors involved are considered. They do not take into account the improvement in medical science, particularly in the field of detection of physical and mental defects or the changed standards for measuring health.
>
> Proof that Americans to-day live longer, have fewer functional diseases and are even taller than formerly can be supplied in abundance. If there are many softies now, they are the middle-aged and older men and women.

Much evidence was offered at the convention to show that provisions for physical education had been stepped up in school and camp and college and in industrial plants, and that the intensified programs include services at all educational levels and for millions of adult citizens.

W. R. Battle, Jr., Birmingham (Ala.) Southern College, discussed the development of the program of intramural athletics in higher institutions and urged that the intramural program in which the general student body of a university participates be carried out in close conjunction with the varsity program of the institution and that it not be considered a "program apart."

In the earlier educational years the teaching

of nutrition had a prominent place in the health program. Helen S. Mitchell, principal nutritionist, Office of Coordinator of Health, Welfare and Related Defense Activities, FSA, discussed "Nutrition for Health Plus."

In World War I the emphasis was on getting enough food to keep the men from starving from hollow hunger; now it is on conservation of food values to keep men strong by satisfying hidden hungers. The food for the armed forces in 1918 was calculated in calories and protein; to-day it is calculated in calories and proteins, *plus* calcium, phosphorus, iron, vitamins A B C D and so on. In 1917, we shipped calories overseas in form of white flour and sugar; to-day shipping space was used for foods containing proteins, minerals and vitamins. England is calculating the crops which may be produced locally to give the greatest possible yield of vitamins and minerals per acre to supplement her imports. To-day we know that men may remain well longer with a slight shortage of calories than they can with sufficient calories but deprived of other essentials.

Ralph M. Voorhees, of the Brunswick Balke-Collender Company, Chicago, outlined a program of industrial recreation. He said in part:

Tools and machines will break down under the terrific pressure and be relegated to the scrap heap, even though these same machines will have had the best of care. . . . But what about the human machine? . . . It's one of our jobs at this conference to make sure skilled maintenance crews for the human machine will be on hand to forestall the possibility of collapse.

In addition to medical attention and safety devices in factories, Mr. Voorhees advocated a planned industrial recreation program "to keep the human machine oiled, greased and in tip-top working condition—and free from the devastating poisons of physical and mental fatigue."

William L. Hughes, professor of physical education, Teachers College, Columbia University, called attention to the gross inequalities of health and physical education among the states, calling these inequalities indefensible. He asked for federal aid in creating a program of physical fitness that would be nation-wide, making provisions for 130,000,000 citizens. He saw in the present cooperation of the federal government in the physical-fitness movement a hopeful sign for the future. "The transfer of the Division of Physical Fitness to the Federal Security Agency may be epoch making for physical education," he said, and added:

In the future the Federal Security Agency may well set the pattern for local communities in integrating and unifying welfare agencies. Physical fitness belongs in this picture along with education, public health, nutrition and recreation.

Federal Security Administrator Paul V. McNutt, who addressed the convention by radio from Washington, proposed a comprehensive program of health and recreation under the direct supervision of community and state leaders. He reminded the educators of the emphasis placed upon physical education by the ancient Greeks, giving their interest in sports great credit for the cultural leadership of that nation over so many centuries. He advocated the development of an all-round sports activity for all America which might find its climax at regular intervals in American Olympic games.

A message to the convention from Brigadier General Lewis B. Hershey, director of the Selective Service System, included the following statement:

The contest in which we are engaged to-day is a grim one. It is one without rules, without the ethics of sportsmanship. No referee, no umpire will signal its close, but the men of this land who enter it must be physically sound, hard of body and limb, if we are to win our goal. It is up to you to lend all possible aid to these men—to all our people—in their efforts to become physically sound, physically superior to our foes. I commend you to your task.

Captain Sylvio de Magalhães Padilha was guest of the convention as official representative of the Brazilian government. As director of sports and physical training for the state of Sao Paulo, he was well qualified to discuss the objectives and the technics employed in the health and physical-education programs of Brazil which are operated jointly by civilian and military management.

A restatement of the platform of the American Association for Health, Physical Education and Recreation includes the following eight points:

1. As shown by the draft, 50 per cent. of American youth have disabling defects; hence it is necessary to have medical and dental examinations for every young person of school age, the type of ex-

amination and the organization necessary to be determined by organized medicine and public health.

2. The neglected defects in childhood are the same defects which prevent acceptance for service; hence it is important to secure early correction of every remediable defect, the ways and means to be determined by the family and community.

3. Many young persons violate health practices because they do not know how to live; hence there should be emphasis upon rest and sleep, nutrition, recreation, exercise, mental and social hygiene, medical and dental care in order to develop desirable patterns of living.

4. Many children fail to grow properly, are weak, are unable to protect themselves adequately in emergencies and lack recreational skills; hence all children should be taught motor skills which promote growth, development, safety and recreation suitable to age, sex and condition of health. A program of physical education consisting *only* of weight-lifting, strength stunts, calisthenics, marching or similar exercises is too limited for the needs of growing boys and girls.

5. The things children learn in school should function in their lives now, and afterward in civilian life; hence the program should consist of rhythms, games, sports, athletics and body-building activities, the latter directed particularly to the arms and upper back. The program should include competitive interschool athletics suitable for the individual concerned.

6. There are many desirable facilities and opportunities in the community; hence, in conjunction with the regular program of the school, wide use should be made of community and state facilities and opportunities for camping, hiking, riding, boating and similar out-of-doors activities.

7. Vitality, strength and skills can not be developed without adequate time; hence, in order to develop agility, skills, ruggedness, strength and endurance, a daily program of participation under qualified instructors throughout childhood and youth should be provided.

8. No comprehensive programs are possible without facilities; hence communities should provide adequate indoor and outdoor facilities, including facilities for swimming, in order to make possible a desirable program of physical education for all children and youth.

A. H. Pritzlaff, director of physical education in Chicago, was elected president of the association for the year, 1943–44. Jay B. Nash, president-elect for the year 1942–43, was inducted into his office at the close of the convention.

Vice-presidents were elected for the three major fields of the organization as follows: *Recreation*—A. H. Wyman, municipal director of recreation, St. Louis; *physical education*—Harry A. Scott, director of physical education, the Rice Institute, Houston; *health education*—Clair E. Turner, professor of biology and public health, Massachusetts Institute of Technology.

The following were elected fellows of the association, in recognition for distinguished leadership and meritorious service to the profession: Walter Henry Brown, M.D., professor of hygiene, School of Hygiene and Physical Education, Stanford University; Louise S. Cobb, regional representative, Physical Fitness Program of the Office of Civilian Defense, Ninth Civilian Defense Area; Dorothy Enderis, assistant superintendent of schools, Milwaukee; Mary Gross Hutchinson, head, department of physical education for women, University of Washington (Seattle); Willard Walter Patty, School of Education, Indiana University; Norma Schwendener, department of health and physical education, Teachers College, Columbia University; William K. Streit, director of physical education, Cincinnati Public Schools, and Paul R. Washke, professor of physical education, University of Oregon.

The 48th annual convention will be held in Cincinnati. For the two following years the convention will be held in Seattle and Kansas City (Mo.), respectively.

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Reports . . .

MOUNT HOLYOKE'S TWO-UNIT PLAN

OVER a century ago Mary Lyon founded Mount Holyoke Seminary. Higher education for women was so advanced an idea as to be almost a religious heresy. The college into which this seminary grew has continued the forward-looking convictions which inspired and effected its foundation. It is now nearly two decades since its newest educational experiment was first mooted: freedom from course-require-

ments to gain a liberal education with an individualized program. This experiment is known as the Two-Unit Plan, and has been in operation for six years.

One of the distinctive features of Mount Holyoke College is the close contact maintained between teachers and students in moderate-sized classes, in conferences, in opportunities for individual work. This principle, that the best education comes from personal conversation between teacher and student, is at the heart of the Two-Unit Plan. Under this plan, suitable students are allowed to begin individualized study as early as their first year in college.

This educational experiment removes course-requirements and provides tutorial guidance for independent study during all four years of work for the bachelor's degree. Instead of meeting some fifteen class-appointments in five different courses during the week, the Two-Unit student divides her time in any one semester between two subjects of study, known as units. Her own intellectual interests furnish the starting-point in her choice of units. As she explores these fields in wide reading and intensive investigation, her interests develop: the student who thought she cared for only one or two subjects finds that others are essential to her understanding of these and is led by her own curiosity into new fields; the one who had too great a multiplicity of interests finds their logical connections and learns to canalize her energies to integrated results.

To undertake this kind of work the student needs a good general preparation. She is therefore expected to satisfy the usual entrance requirements for the liberal-arts college. In addition she must present evidence that she has mature intellectual interests, with sufficient independence in thought and initiative in action to profit by the adventures in learning which the plan offers.

The student admitted to this "progressive" plan of individualized study has unusual advantages in pursuing it at a long-established college. In the Mount Holyoke library she finds a wealth of books, collected with discrimination and foresight for more than a century. For the laboratory work in any field she has extensive, up-to-date equipment and museum-collections. Among the instructors with whom she may work are gifted teachers and famous specialists whose work is nationally and internationally esteemed.

The standard of Two-Unit work is high. Many students under this plan do honor work, win prizes and are elected to Phi Beta Kappa. Several have won graduate fellowships. But they are not "drips," blue-stockings or supercilious intelligentsia. Since the concentration of their programs allows them to organize their work in uninterrupted stretches, they are also able to plan their leisure effectively. Their creative work in writing and the other arts is distinguished. They figure largely in campus activities and frequently hold executive positions.

Two-Unit students arrange their programs with the aid of an adviser specially chosen to guide the group. The work of each unit is planned with the instructor concerned and is directed in individual conference. The student may supplement her independent work by joining in group discussions or classwork when these seem desirable for the better mastery of a subject or for the better advancement of her own abilities. She usually finds, as her work develops, that she needs some familiarity with all the main fields of knowledge, so that by the end of her course she has gained a cultural background similar to that of the students who fulfill the usual course-requirements. In addition, she has had a great deal more experience in finding material and solving problems for herself. If she does not readily perceive a correlation between her special interests and the subjects which at first seemed remote or uninteresting, she is strongly advised to approach the problem from the other direction and include in her program some work from each of the main fields of learning. The specialist in history finds illumination of her favorite period in its literature, art or music, and studies the contemporaneous progress of science. The scientist wonders what effect laboratory experience has had upon the philosophy of an individual or an age, and from that becomes interested in the literature of which that philosophy is a part, or in the languages in which the philosophers have written. The creative artist investigates the historical background of the monuments which inspire her work, explores aesthetic theory and does not find geological or physiological struc-

ture foreign to the development of her individual gifts.

The Two-Unit Plan is "progressive" in its flexible adaptability to each student as an individual whose abilities and needs are carefully studied. It is time-honored in its use of the tutorial approach. It is unique in being set in one of the oldest colleges for women, one of the principal exponents of the traditional liberal-arts education.

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Research . . .

INTELLIGENCE OF UNIVERSITY STUDENTS BY SIZE OF COMMUNITY OF RESIDENCE

ALTHOUGH the evidence reported on the differential intelligence-test performance of rural and urban populations has been very extensive and so generally consistent in revealing urban superiority,[1] there is still some justification for further study. In the first place, it is important to learn if the differences originally discovered, many of which were reported some years ago, continue to be revealed in more recent years. In the second place, there is need for further exploration in various sections of the country and in various population categories. The data reported below provide information on both points. And they also help to answer a question closely related to that of general rural-urban differences: Is there any evidence of a regular progression in average intelligence-test performance from the smallest to the largest communities? Although the general differences between city and country imply a tendency toward such a progression, knowledge on the question has remained scanty.

The data to be reported were taken from the intelligence-test records of students entering the University of Kansas for the first time, either as first-year or advanced students, during the sessions 1934–35, 1935–36, 1936–37 and 1937–38, comprising a total of 5,724.[2] The classification of students by residence was made on the basis of the community of residence at the time of entry into the university.[3] Table I contains the basic data of the study, the records for the four years being combined. The intelligence-test data are based on percentile scores, the original tests being those of the ACE. The higher intelligence scores were in the 91–100 percentile category.

[1] *Cf.* P. A. Sorokin, C. C. Zimmerman and C. J. Galpin, "Systematic Source Book in Rural Sociology," Minneapolis, 1932, Volume III, pp. 266–281, for a review of 65 studies made up to 1929. Also see T. C. McCormick, *Sociology and Social Research*, 16: 259–266, 1932; and N. P. Gist and C. D. Clark, *American Journal of Sociology*, 44: 36–58, 1938.

[2] Students from foreign countries were not included, but there was no other selection of cases.

[3] It is recognized that this method of determining residence has disadvantages, the most important being the fact that the place of residence at time of entry into the university is not known to bear a close relationship to the place of residence during most of the person's life. The implications of residence at time of entry will have to be determined by a separate study.

TABLE I

PERCENTILE INTELLIGENCE SCORES OF UNIVERSITY STUDENTS CLASSIFIED BY SIZE OF COMMUNITY OF RESIDENCE

Population of community of residence	Percentiles										
	91–100	81–90	71–80	61–70	51–60	41–50	31–40	21–30	11–20	1–10	Total
1,000,000 and over ...	4	6	5	7	2	7	6	4	4	5	50
500,000–999,999	5	5	5	0	0	1	5	3	2	5	31
250,000–499,999	118	118	102	93	69	64	40	41	55	26	726
125,000–249,999	12	11	12	10	10	3	5	9	12	12	96
62,500–124,999	130	125	94	114	109	77	74	62	85	67	937
30,000– 62,499	3	5	2	9	5	4	4	9	2	2	45
15,000– 29,999	63	41	58	40	38	32	49	48	32	39	440
7,500– 14,999	135	115	142	107	127	102	121	94	88	91	1,122
2,500– 7,499	103	101	111	81	102	67	81	73	61	75	855
1,000– 2,499	48	51	74	64	65	49	77	56	72	70	626
Under 1,000	62	85	89	63	71	81	75	87	84	99	796
Total	**683**	**663**	**694**	**588**	**598**	**487**	**537**	**486**	**497**	**491**	**5,724**

Careful examination of Table I reveals a tendency for intelligence to be in the higher percentile brackets in the group as a whole.[4] Thus in the 250,000–499,999 residence category the modal intelligence deciles were the highest and that next to the highest. The mode for the 62,500–124,999 category was in the 91–100 range also. These facts, taken alone, suggest an impressive correlation between size of population of place of residence and intellectual status of the students. And this is what would be expected from a consideration of other studies of intelligence related to urbanization. However, since the same tendency for high scores is found in the population categories 15,000–29,999, and to only a slightly smaller extent, in the 75,000–14,999 and 2,500–7,499 categories, it is obvious that the correlation can not be very close. This impression remains, even when it is noted that in each of the rural categories the proportion of low intelligence scores was larger than for the various urban population categories. The product-moment correlation coefficient, r, of only $+.117 \pm .009$, bears out the general impression. Although the coefficient is small, indicating a very small relationship between size of community of residence and intelligence of university students, it is highly reliable, because of the large number of scores involved.

The striking difference between both of the series of rural students in Table I and the general trend of all the larger urban series suggests a reliable urban-rural difference in line with those so frequently reported in other studies. Table II summarizes the data for ready comparison. It is noteworthy that the percentage of cases in the percentile range 1–30 was much greater in the rural than in the urban category (32.9 and 23.4 per cent., respectively). In contrast, the urban category was more heavily represented than the rural category in the 71–100 percentile range, the percentages being 37.9 and 28.8, respectively. The urban mean was 56.12, compared with a rural mean of 48.25, yielding a difference of 7.87. Since the standard error of the difference was only .878, the critical ratio was 8.96. The data thus reveal a "true" intelligence-test difference between recent university students of urban and rural residence.

TABLE II

PERCENTAGE DISTRIBUTION OF INTELLIGENCE TEST PERCENTILE SCORES FOR URBAN AND RURAL UNIVERSITY STUDENTS

Intelligence score in percentile	Urban		Rural	
	N	Per cent.	N	Per cent.
1– 10	322	7.5	169	11.9
11– 20	341	7.9	156	11.0
21– 30	343	8.0	143	10.0
31– 40	385	9.0	152	10.7
41– 50	357	8.3	130	9.1
51– 60	462	10.7	136	9.6
61– 70	461	10.7	127	8.9
71– 80	531	12.3	163	11.5
81– 90	527	12.3	136	9.6
91–100	573	13.3	110	7.7
Total	4,302	100.0	1,422	100.0
1– 30	1,006	23.4	468	32.9
31– 70	1,665	38.7	545	38.3
71–100	1,631	37.9	409	28.8
Total	4,302	100.0	1,422	100.0

The new question raised in connection with this study, whether there is a regular progression in average intelligence-test performance from the smallest to the largest communities, remains to be discussed. The data of Table I imply a negative answer, since the general distribution of scores was much the same for all the population groups. Table III bears out this implication, both in the percentages and the mean percentile for the population categories. The smallest urban population category did not have the lowest mean percentile score nor the highest percentage of scores in the lowest percentiles. Indeed, the largest population group stood out in both these respects, contrary to expectations.

However, it should be noted that there is some support for the hypothesis of regular progression. The largest population categories may be

[4] The classification of urban categories was selected so as to closely approximate a series of geometric progression, beginning with 1,000,000 population and dividing that figure by 2, then by 4, then by 8, then by 16, each figure in turn being the lower limit of a category. Since division by 32 would yield a figure 31,250, that by 64 would yield 15,625 and further division of the same sort would yield fractional values, 30,000 was arbitrarily employed in place of 31,250 in order to make it possible to continue the progression by successively halving the figures. The drop from 7,500 to 2,500 was arbitrary also, but the figure of 3,750 would have made the halving process impossible in the last step, without going below the urban-rural boundary of 2,500. The reverse process of doubling, beginning with 2,500 would be somewhat more justifiable than the present method, but categories at the upper limit would result entirely different from any now in use.

TABLE III

PERCENTAGE DISTRIBUTION OF INTELLIGENCE TEST PERCENTILE SCORES FOR VARIOUS URBAN RESIDENCE CATEGORIES OF UNIVERSITY STUDENTS

Intelligence scores in percentile	Size of Population									
	500,000 and over		125,000–499,999		30,000–124,999		15,000–29,999		2,500–14,999	
	N	Per cent.	N	Per cent.	N	Per cent.	N	Per cent.	N	Per cent.
1– 10	10	12.4	38	4.6	69	7.0	39	8.9	166	8.4
11– 20	6	7.3	67	8.2	87	8.9	32	7.3	149	7.5
21– 30	7	8.6	50	6.1	71	7.2	48	10.9	167	8.5
31– 40	11	13.6	45	5.5	78	7.9	49	11.1	202	10.2
41– 50	8	9.9	67	8.2	81	8.3	32	7.3	169	8.6
51– 60	2	2.5	79	9.6	114	11.6	38	8.6	229	11.6
61– 70	7	8.6	103	12.5	123	12.5	40	9.1	188	9.5
71– 80	10	12.4	114	13.8	96	9.8	58	13.2	253	12.8
81– 90	11	13.6	129	15.7	130	13.2	41	9.3	216	10.9
91–100	9	11.1	130	15.8	133	13.6	63	14.3	238	12.0
Total	**81**	**100.0**	**822**	**100.0**	**982**	**100.0**	**440**	**100.0**	**1,977**	**100.0**
1– 30	23	28.3	155	18.9	227	23.1	119	27.1	482	24.4
31– 70	28	34.6	294	35.8	396	40.3	159	36.1	788	39.9
71–100	30	37.1	373	45.3	359	36.6	162	36.8	707	35.7
Total	**81**	**100.0**	**822**	**100.0**	**982**	**100.0**	**440**	**100.0**	**1,977**	**100.0**
Mean percentile	51.92		61.26		56.46		54.00		54.46	

eliminated from consideration, because of the small number of cases, only 81, and the fact that they could have come only from much greater distances than was true of the bulk of the students. And there is consistency in the three categories 125,000–499,999, 30,000–124,999 and 15,000–29,999, in both mean percentile scores and percentage of cases in the percentile range 1–30. The major inconsistency is thus in the relations of the two smallest urban population categories, and here the possibility of abnormality must be recognized, since the location of the university is in the smallest urban group and this fact may have influenced the series.

Even if the university community cases were eliminated from the study of regular progression, however, the results for the two subdivisions of the rural category would not fit into the sequence, because the students from places of less than 1,000 population surpassed those from the larger rural areas in mean percentile score, the figures being 46.14 and 45.77, respectively.

It is also important to note that most of the standard errors of the differences for the items in the series are too large to justify a conclusion that true differences, that is, those not affected by chance factors, exist between most of the categories. The only reliable differences in the direct line of progression were those between the 1,000–2,499 and 2,500–14,999 categories, and between the 30,000–124,999 and 125,000–499,999 categories. The differences are revealed in Table IV, which also contains the critical ratios for each of the five categories of Table III, plus the two rural categories, compared with each of the other six categories. Consequently, although there is some tendency in the direction of a regular progression in average intelligence of subjects from smallest to largest communities, regularity is not disclosed. However, if data could be obtained which are known to be unaffected by the adverse selective factors mentioned, it still remains possible that support for the hypothesis would be found.

TABLE IV

CRITICAL RATIOS FOR MEAN PERCENTILE INTELLIGENCE TEST DIFFERENCES BETWEEN CATEGORIES OF UNIVERSITY STUDENTS*

	500,000 and over	125,000–499,999	30,000–124,999	15,000–29,999	2,500–14,999	1,000–2,499	Under 1,000
500,000 and over	X						
125,000–499,999	*2.71*	X					
30,000–124,999	1.30	*3.63*	X				
15,000– 29,999	.57	4.27	*1.47*	X			
2,500– 14,999	.74	5.89	1.80	*.30*	X		
1,000– 2,499	1.71	9.68	6.81	4.34	*6.08*	X	
Under 1,000 . . .	1.59	8.86	6.16	3.96	5.37	*.19*	X

* Values in italics are those in the line of direct progression.

It is important to note that most of the standard errors of the differences for the items in the series are too large to justify a conclusion that true differences, that is, those not affected by chance factors, exist between most of the categories. The only reliable differences in the direct line of progression were those between the 1,000–2,499 and 2,500–14,999 categories, and between the 30,000–124,999 and 125,000–499,999 categories. The differences are revealed in Table IV, which also contains the critical ratios for each of the five categories of Table III, plus the two rural categories, compared with each of the other six categories. Consequently, although there is some tendency in the direction of a regular progression in average intelligence of subjects from smallest to largest communities, regularity is not disclosed. However, if data could be obtained which are known to be unaffected by the adverse selective factors mentioned, it still remains possible that support for the hypothesis would be found.

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RECENT *Publications*

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ATKINSON, CARROLL. *Public School Broadcasting to the Classroom* (Hattie and Luther Nelson Memorial Library). Pp. 144. Meador Publishing Company, Boston. 1942. $1.50.

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An intensive survey (sponsored and supported by the Dartmouth Eye Institute) of visual factors in relation to college adjustment, giving, beside statistical data, a set of 20 detailed psycho-portraits based upon an extensive battery of tests, interviews and an autobiography. "The conclusions of this study are important. Visual factors, even extreme deviations, it is found, do not in and of themselves cause maladjustment."

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Discussing what it takes to be a successful secondary-school teacher; how American secondary education happens to be what it is; what the secondary school is supposed to do and how it is to be done; how the school can tell how well it is doing its work, and how to be a successful teacher.